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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
MARKUS KLUMPE, ET AL. : EXAMINER: KEYS, ROSALYND ANN
SERIAL NO: 10/575,760 :
FILED: APRIL 13, 2006 : GROUP ART UNIT: 1621
FOR: C10 ALKANOLALKOXYLATE :
MIXTURES AND USE THEREOF AS
NOVEL LOW-FOAMING WETTING
AGENTS

PRE-APPEAL BRIEF REQUEST FOR REVIEW

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

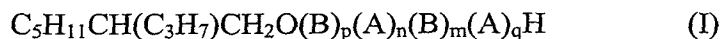
SIR:

Applicants respectfully request review of the rejection of Claims 1, 2 and 5-10 under 35 U.S.C. 103(a) over Dahlgren et al. (WO 94/11331)('331) in view of Dahlgren et al. (WO 94/11330)('330) and further in view of Clement et al. (WO 01/04183 A1).

No more than five (5) pages of argument are provided.

A Notice of Appeal is submitted herewith.

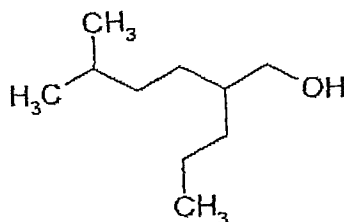
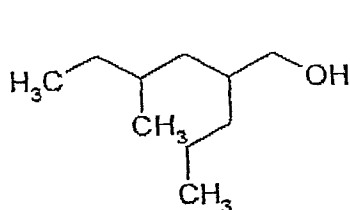
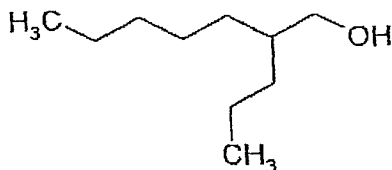
Independent Claim 1 provides an alkoxylate mixture comprising alkoxylates of the formula (I)



where

A is ethyleneoxy, B is propyleneoxy and groups A and B are present in the form of blocks in the stated sequence, p is from 1 to 3, n is from 0.25 to 10, m is from 2 to 10, and q is from 1 to 5. The mixture contains from 85 to 96% by weight of alkoxylates A1, in which C_5H_{11} is n- C_5H_{11} , and from 4 to 15% by weight of alkoxylates A2, in which C_5H_{11} is $\text{C}_2\text{H}_5\text{CH}(\text{CH}_3)\text{CH}_2$ and/or $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2$.

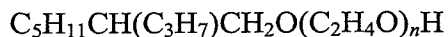
Accordingly, the claimed mixture contains an alkoxylates mixture of the following alcohol chemical structures:



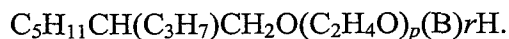
Applicants have provided specific examples of alkoxylates according to the claimed invention based on an isomer mixture comprising 87% of 2-propylheptan-1-ol, 11% of 2-propyl-4-methylhexan-1-ol and < 1% of 2-propyl-5-methylhexan-1-ol (page 13). Moreover, Applicants have described that the claimed isomer mixture must be specially prepared or combined (page 4, lines 27-30):

The novel alkoxylate mixtures are obtained by alkoxylation of the parent alcohols $\text{C}_5\text{H}_{11}\text{CH}(\text{C}_3\text{H}_7)\text{CH}_2\text{OH}$. **The starting alcohols can be mixed from the individual components so that the novel ratio results.** (Bold added for emphasis)

Dahlgren('331) is directed to a process for cleaning hard surfaces with a detergent comprising an alkoxylate selected from the group consisting of



and



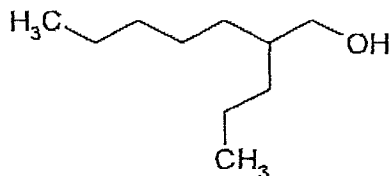
This reference specifically describes 2-propylheptanol as the starting alcohol for alkoxylation (page 1, lines 24-29) and does not disclose or suggest an isomeric mixture as according to the claimed invention.

The Examiner alleges that (Official Action dated March 23, 2010, page 3, third paragraph) that it is well known that C_5H_{11} usually occurs or is formed as a mixture of isomers and that the C_5H_{11} portion of the compounds of Dahlgren '331 would likely be such a mixture of isomers.

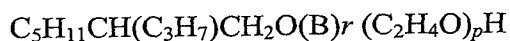
However, Applicants note that Dahlgren describes 2-propyl heptanol as a Guebert alcohol (page 2, line 27), which Applicants submit is a misspelling of the term "Guerbet alcohol" and is a product obtained by the Guerbet reaction as described in the attached Wikipedia article. Applicants submit that as described in the article, 2-propyl heptanol is obtained via the Guerbet reaction of **1-pentanol**, a straight chain alcohol. The mechanism of this reaction and resulting structures are shown in the equations on the top of page 2 of the Wikipedia article ($\text{R} = \text{CH}_3\text{CH}_2\text{CH}_2-$). As shown by the mechanism, 2-propyl heptanol is the Guerbet reaction product of 1-pentanol and therefore cannot be the mixture the Office alleges.

Applicants respectfully submit that the assumption made by the Office cannot reasonably be supported nor applied as support for a conclusion of obviousness. Applicants submit that as at the very least, one of ordinary skill in the art, Dahlgren is aware and knowledgeable of the significance of chain branching/chain length influence on chemical

properties and by describing 2-propylheptanol as a Guerbet alcohol, Dahlgren defines a specific chemical structure having a **normal chain** C_5H_{11} structure as shown below.



Dahlgren(‘330) is also directed to an alkoxylate of the formula:



which is based on 2-propylheptanol, also described as a Guebert alcohol (page 2, line 16).

Clement is cited to show a double metal cyanide catalyst for alkoxylation. The tertiary reference does not disclose or suggest the alkoxylate mixture according to the claimed invention.

In asserting that it is well known that C_5H_{11} usually occurs or is formed as a mixture of isomers, the Examiner appears to be alleging that the isomer composition is inherent to the C_5H_{11} structure.

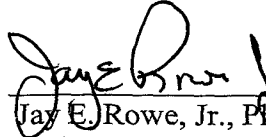
To establish inherency, the extrinsic evidence ‘must make clear that **the missing descriptive matter is necessarily present** in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. **The mere fact that a certain thing may result from a given set of circumstances is not sufficient.**’ (*In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)(citations omitted)(Bold added for emphasis)

Applicants submit that by describing 2-propyl heptanol as a Guebert [Guerbet] alcohol, both Dahlgren references clearly indicate a straight chain structure and therefore, the isomeric mixture alleged by the Examiner cannot be inherent.

In view of the foregoing, Applicants respectfully submit that the cited combination of references does not describe all the claimed elements and provides no motivation which would have led one of ordinary skill to the present invention. Accordingly, withdrawal of the rejection of Claims 1-2 and 5-10 under 35 U.S.C. 103(a) over Dahlgren ('331) in view of Dahlgren ('330) and further in view of Clement is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.
Norman F. Oblon



Jay E. Rowe, Jr., Ph.D.
Registration No. 58,948

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 07/09)